

**SCORE Search Results Details for Application  
10734564 and Search Result  
20070524\_133451\_us-10-734-564-2.rag.**

Score Home [Retrieve Application](#) [SCORE System Overview](#) [SCORE FAQ](#) [Comments / Suggestions](#)

This page gives you Search Results detail for the Application 10734564 and Search Result 20070524\_133451\_us-10-734-564-2.rag.

[Go Back to previous page](#)

GenCore version 6.2.1  
Copyright (c) 1993 - 2007 Bioceleration Ltd.

OM protein - protein search, using sw model  
Run on: May 24, 2007, 16:25:44 ; Search time 132 Seconds  
(without alignments)  
615.374 Million cell updates/sec

Title: US-10-734-564-2  
Perfect score: 903  
Sequence: 1 MAQNSFFMLISSIMFLSLSS.....QKWKDVPCEDKSFVCXFKN 166

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 2782304 seqs, 489333398 residues

Total number of hits satisfying chosen parameters: 2782304

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : A\_Geneseq\_200701.\*  
1: geneseqp1980s.\*  
2: geneseqp1990s.\*  
3: geneseqp2000s.\*  
4: geneseqp2001s.\*  
5: geneseqp2002s.\*  
6: geneseqp2003as.\*  
7: geneseqp2003bs.\*  
8: geneseqp2004s.\*  
9: geneseqp2005s.\*  
10: geneseqp2006s.\*  
11: geneseqp2007s.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	903	100.0	166	8	ADQ29576	Adg29576 Human Reg
2	890	98.6	166	8	ADU20784	Adu20784 Human Reg
3	884	97.9	166	2	AAR59288	Aar59288 Human reg
4	884	97.9	166	4	AAB71653	Aab71653 Human col
5	884	97.9	166	4	AAB71666	Aab71666 Human col
6	884	97.9	166	8	ADQ29578	Adg29578 Human Reg
7	884	97.9	166	8	ADQ60160	Adg60160 Human reg
8	884	97.9	166	8	ADS97994	Adg97994 Protein f
9	884	97.9	166	9	AEA04450	Aea04450 Human pro
10	884	97.9	174	3	AAB43737	Aab43737 Human can
11	874	96.8	166	1	AAP81514	Aap81514 Sequence
12	873	96.7	165	1	AAP94614	Aap94614 Human reg
13	810	89.7	146	2	AAR66591	Aar66591 Human reg
14	810	89.7	147	2	AAR66425	Aar66425 Reg prote
15	804	89.0	166	7	ADC78801	Adc78801 Human PRO
16	804	89.0	166	8	ADU20785	Adu20785 Human Reg
17	804	89.0	166	9	AEA04451	Aea04451 Human pro
18	804	89.0	166	10	AEF69882	Aef69882 Microstate
19	804	89.0	174	3	AAB54301	Aab54301 Human pan
20	799	88.5	144	2	AAR66592	Aar66592 Human reg
21	797	88.3	166	5	ABP69448	Abp69448 Human pol
22	797	88.3	166	8	ADS98793	Ads98793 Protein f
23	745	82.5	133	2	AAR66593	Aar66593 Human reg
24	669	74.1	165	2	AAR34535	Aar34535 MUREG-1.
25	626	69.3	165	1	AAP94615	Aap94615 Rat reg p
26	624	69.1	165	1	AAP81513	Aap81513 Sequence
27	624	69.1	165	1	AAP83188	Aap83188 Sequence
28	609.5	67.5	173	2	AAR59289	Aar59289 Rat reg p
29	609.5	67.5	173	2	AAR34536	Aar34536 MUREG-2.
30	582	64.5	146	2	AAR66594	Aar66594 Rat reg p
31	571	63.2	144	2	AAR66595	Aar66595 Rat reg p
32	564.5	62.5	294	4	ABG01855	Abg01855 Novel hum
33	564.5	62.5	294	8	ADS98699	Ads98699 Protein f
34	564.5	62.5	406	4	ABG03060	Abg03060 Novel hum
35	564.5	62.5	406	8	ADS98701	Ads98701 Protein f
36	564.5	62.5	558	4	ABG00465	Abg00465 Novel hum
37	536	59.4	132	8	ADO21124	Ado21124 Human car
38	534	59.1	133	2	AAR66596	Aar66596 Rat reg p
39	489	54.2	240	4	ABG20353	Abg20353 Novel hum
40	465	51.5	117	6	ABR57096	Abj57096 MLHR comp
41	423.5	46.9	175	5	ABJ10605	Abj10605 Human nov
42	423.5	46.9	175	8	ADO09871	Ado09871 Human NOV
43	418.5	46.3	175	2	AAR57117	Aar57117 Human Pan
44	418.5	46.3	175	2	AAR54098	Aar54098 Mouse PAP
45	418.5	46.3	175	7	ADC78805	Adc78805 Human PRO

ALIGNMENTS

RESULT 1  
ADQ29576  
ID ADQ29576 standard; protein: 166 AA.  
XX  
AC ADQ29576;

XX	DT	07-OCT-2004 (first entry)
XX	DE	Human Regl-alpha protein #1.
XX	KW	human; colon cancer; TIMP1; Regl-alpha; colorectal cancer-associated marker.
XX	OS	Homo sapiens.
XX	PN	EP1439393-A2.
XX	PD	21-JUL-2004.
XX	PF	15-DEC-2003; 2003EP-00257868.
XX	PR	13-DEC-2002; 2002US-0433554P.
XX	PR	31-JUL-2003; 2003US-0491397P.
XX	PA	(FARB ) BAYER HEALTHCARE LLC.
XX	PA	(MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
XX	PI	Astle JH, Boardman LA, Bugart LJ, Burgess CC, Catino TJ;
PI	PI	Dwivedi P, Huncress M, Johnson KA, Lewis ME, Maimonis RJ, Myerow SH;
PI	PI	Brown-Shiner SA, Thiagalingam A, Thibodeau SN, Molino GA;
XX	DR	WPI; 2004-545561/53.
DR	DR	N-PSDB; ADQ29575.
XX	XX	
PT	PT	Diagnosing colon cancer in individual, preferably human, by detecting presence of TIMP 1 in sample, where presence of TIMP 1 in sample is indicative of colon cancer in individual.
XX	PS	Claim 7; SEQ ID NO 2; 433pp; English.
XX	XX	
CC	CC	The invention comprises a method for diagnosing colon cancer in an individual, the method involves obtaining a serum sample from the individual and detecting the presence of either TIMP1 or Regl-alpha and an additional colorectal cancer-associated marker. The method of the invention is useful for diagnosing colon cancer in an individual. The present amino acid sequence represents a human Regl-alpha protein of the invention.
XX	XX	
SQ	SQ	Sequence 166 AA;
		Query Match 100.0%; Score 903; DB 8; Length 166;
		Best Local Similarity 100.0%; Pred. No. 7.2e-80;
		Matches 166; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	QY	1 MAQTNSFEMLISLMLFSLISQGEAQTELPOARISCPGEGNAYRSYCYFFNEDERTWDA 60
Db	Db	1 MAQTNSFEMLISLMLFSLISQGEAQTELPOARISCPGEGNAYRSYCYFFNEDERTWDA 60
QY	QY	61 DLYQNNNSGNLVSVLTOAEGAFVASLLKESGTDGDFNVWIGLHDPKRRRHHWSSGSLVS 120
Db	Db	61 DLYQNNNSGNLVSVLTOAEGAFVASLLKESGTDGDFNVWIGLHDPKRRRHHWSSGSLVS 120
QY	QY	121 YKSWGIGAPSSVNPVCYCVSLTSTGFGQWKDVPCEDEKFSFVCKFKN 166
Db	Db	121 YKSWGIGAPSSVNPVCYCVSLTSTGFGQWKDVPCEDEKFSFVCKFKN 166

RESULT 2	
ADU20784	
ID	ADU20784 standard; protein; 166 AA.
XX	
AC	ADU20784;
XX	
DT	13-JAN-2005 (first entry)
XX	
DE	Human Regialpha polypeptide, SEQ ID 1.
XX	
KW	Regialpha; Regibeta; RegIII; RegIV; EXTL3; tumour; Reg signaling; pro-apoptosis; human.
KW	
XX	
OS	Homo sapiens.
XX	
PN	WO2004092352-A2.
XX	
PD	28-OCT-2004.
XX	
PF	14-APR-2004; 2004WO-US009286.
XX	
PR	14-APR-2003; 2003US-0462317P.
XX	
PR	08-APR-2004; 2004US-00819991.
XX	
PA	(UNIW ) UNIV WASHINGTON.
XX	
PI	Dieckgraefe BK, Korzenik JR;
XX	
DR	WPI; 2004-766858/75.
XX	
PT	New methods comprising delivering to a tumor cell an antisense construct comprising at least 15 nucleotides of the complement of a rat, mouse or human Reg gene family cDNA, useful for disrupting Reg signaling pathway.
PT	
XX	
PS	Disclosure; Fig 2; 75pp; English.
XX	
CC	The invention relates to a method that involves delivering to a tumour cell an antisense construct comprising at least 15 nucleotides of the complement of a rat, mouse or human Reg gene family cDNA selected from Regialpha, Regibeta, RegII, RegIV, and EXTL3, where the tumour cell expresses an mRNA molecule that is complementary to native mRNA of the Reg gene. A COX-2 inhibitor, a chemotherapeutic drug and radiation is also administered to the tumour cell. This method also comprises administering to a tumour cell an RNA interference construct comprising at least 19 nucleotides of a rat, mouse, or human Reg gene family cDNA. The RNA interference construct encodes a small hairpin RNA. The RNA interference construct encodes each strand of an interference RNA duplex under the control of a separate promoter. The RNA interference construct contains an inverted repeat of the Reg family gene cDNA. The method alternatively comprises delivering to a tumour cell siRNA comprising 19-21 bp duplexes of a rat, mouse or human Reg gene family RNA, where the siRNA comprises 2 nt 3' overhangs, where the Reg gene mRNA produced by the tumour cell is cleaved. The method can comprise contacting a rat, mouse or human EXTL3 protein and a rat, mouse, or human Reg protein, in the presence or absence of a test substance; determining binding of the Reg protein to the EXTL3 protein in the presence and in the absence of a test compound; and identifying a test substance, which inhibits binding of the Reg protein to the EXTL3 protein. The method can also comprise delivering an inhibitor of binding of, or an antibody that binds to a rat, mouse, or human EXTL3 protein to a rat, mouse, or human Reg protein.

CC	The methods are useful for disrupting Reg signaling pathway to permit									
CC	spontaneous and therapeutic induction of pro-apoptotic signals to be more									
CC	effective. The present sequence represents a human Reg1alpha polypeptide.									
XX										
SQ	Sequence 166 AA;									
Qy	Query Match	98.6%;	Score 890;	DB 8;	Length 166;					
Qy	Best Local Similarity	98.8%;	Pred. No. 1.3e-78;							
Qy	Matches 164;	Conservative 0;	Mismatches 2;	Indels 0;	Gaps 0;					
Qy	1	MAQTNSFFMLISSLMFLSLSOGQEAQTEL	PQARISCPGCTNAYRSYCYFVNEDETRTWDA	60						
Qy	1	MAQTNSFFMLISSLMFLSLSOGQEAQTEL	PQARISCPGCTNAYRSYCYFVNEDETRTWDA	60						
Qy	61	DLYQNNMNSGNLVSVLTQAGAFVASLIKESGTDNFVWIGLHDPKKNRRWHWSSGSLVS	120							
Qy	61	DLYQNNMNSGNLVSVLTQAGAFVASLIKESGTDNFVWIGLHDPKKNRRWHWSSGSLVS	120							
Qy	121	YKSWGIGAPSSVNPGYCVSLTSTGTGQKWKDVPCEDKFSYCKFKN	166							
Qy	121	YKSWGIGAPSSVNPGYCVSLTSTGTGQKWKDVPCEDKFSYCKFKN	166							
RESULT 3										
ID	AAR59288 standard; protein; 166 AA.									
AC	AAR59288;									
DT	25-MAR-2003 (revised)									
DT	03-FEB-1995 (first entry)									
XX	Human reg protein.									
XX	Human reg protein; blood sugar level depressant; hypoglycaemic agent;									
XX	diabetes; hypoglycaemia; cell proliferation; islets of Langerhans.									
XX	Homo sapiens.									
XX	Key	Location/Qualifiers								
FT	Peptide	21..166								
FT	Peptide	/note= "claimed subfragment"								
FT	Peptide	23..166								
FT	Peptide	/note= "claimed subfragment"								
FT	Peptide	34..166								
FT	Peptide	/note= "claimed subfragment"								
XX	WO9412203-A1.									
PN										
XX	09-JUN-1994.									
XX	01-DEC-1993; 93WO-JP001746.									
XX	01-DEC-1992; 92JP-00322121.									
XX	19-APR-1993; 93JP-00091576.									
XX	(SHIO ) SHIONOGI SEIYAKU KK.									
XX	Okamoto H;									
XX	WPI; 1994-199962/24.									
XX										
XX										

XX	Sugar level depressants and cell proliferation agents comprising reg									
PT	proteins - for treatment of diabetes, and inducing growth of islets of									
PT	Langerhans.									
XX										
PS	Claim 1; Page 11; 20pp; Japanese.									
XX										
CC	Three specified subfragments of the human reg protein are claimed for use									
CC	as blood sugar level depressants to treat diabetes. They are also useful									
CC	to induce proliferation of cells in the islets of Langerhans. (Updated on									
CC	25-MAR-2003 to correct PN field.)									
XX										
SQ	Sequence 166 AA;									
Query Match 97.9%; Score 884; DB 2; Length 166;										
Best Local Similarity 97.6%; Pred. No. 5.2e-78;										
Matches 162; Conservative 2; Mismatches 2; Indels 0; Gaps 0;										
Qy	1	MAQTNSFFMLISSLMFLSLSOGQEAQTLPQARISCPGCTNAYRSYCYFVNEDETRTWDA	60							
Db	1	MAQTSSYFMILISCLMFLSLSOGQEAQTLPQARISCPGCTNAYRSYCYFVNEDETRTWDA	60							
Qy	61	DLYQNNMNSGNLVSVLTQAGAFVASLIKESGTDNFVWIGLHDPKKNRRWHWSSGSLVS	120							
Db	61	DLYQNNMNSGNLVSVLTQAGAFVASLIKESGTDNFVWIGLHDPKKNRRWHWSSGSLVS	120							
Qy	121	YKSWGIGAPSSVNPGYCVSLTSTGTGQKWKDVPCEDKFSYCKFKN	166							
Db	121	YKSWGIGAPSSVNPGYCVSLTSTGTGQKWKDVPCEDKFSYCKFKN	166							
RESULT 4										
AAB71653										
ID	AAB71653 standard; protein; 166 AA.									
XX	AAB71653;									
XX	10-MAY-2001 (first entry)									
XX	Human colon associated protein #1.									
DE	Human; colon; cancer; disease.									
KW	Homo sapiens.									
OS	WO200112781-A1.									
PN	22-FEB-2001.									
PD	11-AUG-2000; 2000WO-US022157.									
PF	13-AUG-1999; 99US-0148680P.									
PR	(HUMA-) HUMAN GENOME SCI INC.									
PA	Birse CE, Rosen CA;									
XX	WPI; 2001-147551/15.									
DR	Nucleic acids encoding 13 human colon cancer associated polypeptides,									
XX	useful for preventing, diagnosing and/or treating e.g. cancers									
PT										



PT indicative of colon cancer in individual.  
XX  
PS Claim 7; SEQ ID NO 4; 433pp; English.  
XX  
CC The invention comprises a method for diagnosing colon cancer in an individual, the method involves obtaining a serum sample from the individual and detecting the presence of either TIMP1 or RegI-alpha and an additional colorectal cancer-associated marker. The method of the invention is useful for diagnosing colon cancer in an individual. The present amino acid sequence represents a human RegI-alpha protein of the invention.  
XX  
XX  
SQ Sequence 166 AA;  
Query Match 97.9%; Score 884; DB 8; Length 166;  
Best Local Similarity 97.6%; Pred. No. 5.2e-78;  
Matches 162; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
QY 1 MAQTNSFFMLISSLMFLSLSQGQEAQTLPQARISCEPTGNAYRSYCYFNEDETRTWDA 60  
DB 1 MAQTSSYFMLISCLMFLSLSQGQEAQTLPQARISCEPTGNAYRSYCYFNEDETRTWDA 60  
QY 61 DLYQNNMNSGLVSLTQAGAFVASLIKESGTDDEFNVWIGLHDPKKNRRHWSGSLVS 120  
DB 61 DLYQNNMNSGLVSLTQAGAFVASLIKESGTDDEFNVWIGLHDPKKNRRHWSGSLVS 120  
QY 121 YKSWGIGAPSSVNPVCVSLTSTGFGQKWKDVPCEDKFSFVCKFKN 166  
DB 121 YKSWGIGAPSSVNPVCVSLTSTGFGQKWKDVPCEDKFSFVCKFKN 166  
RESULT 7  
ADQ60160  
ID ADQ60160 standard; protein; 166 AA.  
XX  
AC ADQ60160;  
XX  
XX 07-OCT-2004 (first entry)  
XX  
XX Human regenerating islet-derived 1 alpha (REG 1alpha) protein.  
XX  
XX inflammatory bowel disease; IBD; antiinflammatory; antiulcer;  
KW gastrointestinal; ulcerative colitis; Crohn's disease; human;  
KW regenerating islet-derived 1 alpha; REG 1alpha; receptor.  
XX  
XX Homo sapiens.  
XX  
XX JP2004194534-A.  
XX  
XX 15-JUL-2004.  
XX  
XX 17-DEC-2002; 2002JP-00365079.  
XX  
XX 17-DEC-2002; 2002JP-00365079.  
XX  
XX (SUMU ) SUMITOMO SEIYAKU KK.  
XX  
XX WPI: 2004-537122/52.  
XX  
XX N-PSDB: ADQ60157.  
XX  
XX New markers of inflammatory bowel disease comprise at least 15 base pairs  
PT

PT of the glucose-dependent insulinotropic polypeptide receptor, granulocyte colony-stimulating factor receptor, or regenerating islet-derived 1 alpha genes.  
PT  
XX  
XX  
PS Example 3; SEQ ID NO 6; 57pp; Japanese.  
XX  
CC The invention relates to a novel marker of inflammatory bowel disease (IBD) which comprises a polynucleotide having at least 15 contiguous bases of the base sequence of the glucose-dependent insulinotropic polypeptide receptor (GIPR) gene, granulocyte colony-stimulating factor receptor (GCSFR) gene or regenerating islet-derived 1 alpha (REG 1alpha) gene. The marker of the invention demonstrates antiinflammatory, antiulcer and gastrointestinal activities and may be useful as a probe or primer in the detection and subsequent treatment of inflammatory bowel disease and other conditions such as ulcerative colitis and Crohn's disease. The current sequence is that of the human regenerating islet-derived 1 alpha (REG 1alpha) protein of the invention.  
XX  
XX  
SQ Sequence 166 AA;  
Query Match 97.9%; Score 884; DB 8; Length 166;  
Best Local Similarity 97.6%; Pred. No. 5.2e-78;  
Matches 162; Conservative 2; Mismatches 2; Indels 0; Gaps 0;  
QY 1 MAQTNSFFMLISSLMFLSLSQGQEAQTLPQARISCEPTGNAYRSYCYFNEDETRTWDA 60  
DB 1 MAQTSSYFMLISCLMFLSLSQGQEAQTLPQARISCEPTGNAYRSYCYFNEDETRTWDA 60  
QY 61 DLYQNNMNSGLVSLTQAGAFVASLIKESGTDDEFNVWIGLHDPKKNRRHWSGSLVS 120  
DB 61 DLYQNNMNSGLVSLTQAGAFVASLIKESGTDDEFNVWIGLHDPKKNRRHWSGSLVS 120  
QY 121 YKSWGIGAPSSVNPVCVSLTSTGFGQKWKDVPCEDKFSFVCKFKN 166  
DB 121 YKSWGIGAPSSVNPVCVSLTSTGFGQKWKDVPCEDKFSFVCKFKN 166  
RESULT 8  
ADS97994  
ID ADS97994 standard; protein; 166 AA.  
XX  
AC ADS97994;  
XX  
XX 30-DEC-2004 (first entry)  
XX  
XX Protein factor discovery related isolated human polypeptide, SEQ ID 258.  
XX  
XX antiinflammatory; cytostatic; antimicrobial; gene therapy; inflammation;  
KW leukaemia; nervous system disorder; infection.  
XX  
XX Homo sapiens.  
XX  
XX WO2004087874-A2.  
XX  
XX 14-OCT-2004.  
XX  
XX 24-MAR-2004; 2004WO-US009202.  
XX  
XX 28-MAR-2003; 2003US-0458824P.  
XX  
XX (NUVE-) NUVELO INC.  
XX  
XX

PA	(DRIWA/ DRMANAC R T.
PI	
PP	Tang YT, Zhou P, Wang J, Wang ZW, Hu T;
PR	
DR	WPI: 2004-737686/72.
DR	N-PSDB: ADS97759.
XX	
XX	New polynucleotides encoding a polypeptide with biological activity, or
PT	useful for treating inflammation, leukemias, nervous system disorders, or
PT	infections.
XX	
XX	Claim 20; SEQ ID NO 258; 253pp; English.
PS	
XX	The invention relates to a novel isolated polynucleotide comprising any
CC	of the 235 nucleotide sequences described in the specification. The
CC	invention further comprises: an isolated polynucleotide encoding a
CC	polypeptide with biological activity, where the polynucleotide hybridizes
CC	to one of the 235 novel polynucleotides under stringent hybridization
CC	conditions, or having greater than about 98% sequence identity with the
CC	novel polynucleotide; a vector comprising a novel polynucleotide; an
CC	expression vector comprising the novel polynucleotide; a host cell
CC	genetically engineered to comprise the novel polynucleotide, which can be
CC	operatively associated with a regulatory sequence that modulates
CC	expression of the polynucleotide in the host cell; an isolated
CC	polypeptide encoded by the novel polynucleotide, or a polynucleotide
CC	hybridizing under stringent conditions to the novel polynucleotide; a
CC	composition comprising the polypeptide and a carrier; an antibody
CC	directed against the polypeptide; a method for detecting the novel
CC	polynucleotide in a sample; a method for detecting the polypeptide in a
CC	sample; a method for identifying a compound that binds to the polypeptide
CC	; a method for producing the polypeptide; an isolated polypeptide
CC	comprising any of the 235 amino acid sequences described in the
CC	specification; and a collection of polynucleotides comprising of at least
CC	one of the polynucleotides cited above. The polypeptides and
CC	polynucleotides of the invention have antiinflammatory, cytostatic, and
CC	antimicrobial activities. The novel polynucleotide may be used to treat
CC	disorders by gene therapy. The polypeptides and polynucleotides are
CC	useful for treating inflammation, leukemias, nervous system disorders,
CC	or infections. This sequence represents one of the 235 novel isolated
CC	polypeptides of the invention.

Q	Q	Sequence	166	AA:
Query Match	97.98;	Score	884;	DB 8; Length 166;
Best Local Similarity	97.68;	Pred. No.	5.2e-78;	
Matches 162;	Conservative	2;	Mismatches	-7; Indels 0; Gaps 0;
QY	1	MAQTSSFMILISLMLFLSSQGEAQTELPOARISCEPGTNAYRSYCYFNE	DRET	WVDA 60
Db	1	MAQTSSYFMILISLMLFLSSQGEAQTELPOARISCEPGTNAYRSYCYFNE	DRET	WVDA 60
QY	61	DLYCQNMNSGLNVSLVLTQAGAFVASLIKESGTDDENVWILGURDPK	KNR	RHWHS
Db	61	DLYCQNMNSGLNVSLVLTQAGAFVASLIKESGTDDENVWILGURDPK	KNR	RHWHS
QY	121	YKSWGIGAPSSVNPGYCVSLTSTSTGFGQWKDVP	CP	EDKF
Db	121	YKSWGIGAPSSVNPGYCVSLTSTSTGFGQWKDVP	CP	EDKF
QY	166	YKSWGIGAPSSVNPGYCVSLTSTSTGFGQWKDVP	CP	EDKF
Db	166	YKSWGIGAPSSVNPGYCVSLTSTSTGFGQWKDVP	CP	EDKF
RESULT	9			

AEA04450	
ID	AEA04450 standard; protein; 166 AA.
XX	
AC	AEA04450;
XX	
DT	28-JUL-2005 (first entry)
XX	
DE	Human protein from gene overexpressed in cancer, REG1A.
XX	
KW	Tumor marker; colon tumor; cancer; cytostatic; neoplasm; diagnostic;
KW	microarray; drug screening.
XX	
OS	Homo sapiens.
XX	
PN	W02005044990-A2.
XX	
PD	19-MAY-2005.
XX	
PF	01-NOV-2004; 2004W0-US036404.
XX	
PR	04-NOV-2003; 2003US-00700439.
XX	
PA	(FARB) BAYER HEALTHCARE LLC.
PA	(MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
XX	
PI	Burgess C, Myerow S, Thiagalingam A, Maimonis P, Molino G;
PI	Burgart L, Boardman LA, Thibodeau S, Lewis W;
XX	
DR	WPI; 2005-372198/38.
DR	N-PSDB; AEA04357.
DR	REFSEQ: NP_002900.
XX	
PT	Detecting expression of one or more nucleic acid sequences in biological
PT	sample, useful for detecting cancer, comprises detecting a change in the
PT	expression level of one or more nucleic acid sequences relative to a
PT	control expression level.
XX	
PS	Claim 20; SEQ ID NO 95; 256pp; English.
XX	
CC	The invention relates to detecting differential expression of one or more
CC	nucleic acid sequences (appearing as AEA04356-AEA04448 in a biological
CC	sample comprising obtaining the sample from a subject, and detecting a
CC	change in the expression level of one or more nucleic acid sequences
CC	relative to a control expression level of the nucleic acid sequences, is
CC	new. Also included are detecting cancer (or a pre-malignant condition
CC	thereof) in a subject (comprising comparing the expression level of one
CC	or more nucleic acid sequences in a biological sample from the subject
CC	with a control expression level of the nucleic acid sequences, where a
CC	change of at least two-fold in the expression level of the nucleic acid
CC	sequences is indicative of cancer or pre-malignant condition), monitoring
CC	the onset (or progression, or regression) of cancer (or a pre-malignant
CC	condition) in a subject (by detecting in a biological sample of the
CC	subject at a first point in time the expression of one or more nucleic
CC	acid sequences, repeating the first step at a subsequent point in time
CC	and comparing the expression level detected, where a change in the
CC	expression level is indicative of progression of cancer or its pre-
CC	malignant condition in the subject), determining prognosis for cancer or
CC	its pre-malignant condition in a subject (comprising detecting in a
CC	biological sample of the subject, the expression level of one or more
CC	nucleic acid sequences, comparing the expression level with a reference
CC	expression level of the nucleic acid sequences and evaluating the



AAp81514  
ID AAP81514 standard; protein; 166 AA.  
XX  
AC AAP81514;  
XX  
DT 25-MAR-2003 (revised)  
DT 02-FEB-1991 (first entry)  
XX  
XX Sequence encoded by human reg cDNA.  
XX  
XX Pancreatic islet B cell regeneration; diabetes; therapy.  
XX  
XX Homo sapiens.  
XX  
XX EP286114-A.  
XX  
XX 12-OCT-1988.  
XX  
XX 08-APR-1988; 88EP-00105623.  
XX  
XX 09-APR-1987; 87JP-00087807.  
XX  
XX 10-AUG-1987; 87JP-00200514.  
XX  
XX 24-MAR-1988; 88JP-00071671.  
XX  
XX 04-AUG-1988; 88JP-00195727.  
XX  
XX 09-AUG-1988; 88EP-00112942.  
XX  
XX (SHIO ) SHIONOGI SEIYAKU KK.  
XX  
XX Okamoto H;  
XX  
XX WPI: 1988-287314/41.  
XX  
XX N-PSDB; AAN81962.  
XX  
XX Rat and human reg genes - used for producing proteins for regeneration of  
PT insulin-producing pancreatic B cells of patients with diabetes.  
XX  
XX Disclosure; Fig 3; 12pp; English.  
XX  
XX The reg gene is specifically expressed in regenerating pancreatic islet B  
CC cells. A gene hybridising to a probe corresponding to at least a part of  
CC the whole base sequence of rat reg gene or human reg gene is claimed. By  
CC mass producing the proteins encoded by the gene it may be possible to  
CC open a new dimension in the treatment of diabetes (Updated on 25-MAR-2003  
CC to correct PD field.) (Updated on 25-MAR-2003 to correct PR field.)  
XX  
XX Sequence 166 AA;

Query Match 96.8%; Score 874; DB 1; Length 166;  
Best Local Similarity 96.4%; Pred. No. 4.9e-77;  
Matches 160; Conservative 3; Mismatches 3; Indels 0; Gaps 0;  
QY 1 MAQTSSYFNLISLMFLSLSQSGQAQTLPQARISCEPTGNAYRSYCYFYFNEDETWVDA 60  
DB 1 MAQTSSYFNLISLMFLSLSQSGQAQTLPQARISCEPTGNAYRSYCYFYFNEDETWVDA 60  
QY 61 DLYCQNNMGNLVSVLTOAEGAFVASLTKESGTDDEFNVWIGLHDPKKNRRWHSSGSLVS 120  
DB 61 DLYCQNNMGNLVSVLTOAEGAFVASLTKESGTDDEFNVWIGLHDPKKNRRWHSSGSLVS 120  
QY 121 YKSWGIGAPSSVNPYCVSLTSTGFGKWKDVPCEDKFSFVCKFKN 166  
DB 121 YKSWGIGAPSSVNPYCVSLTSTGFGKWKDVPCEDKFSFVCKFKN 166

DB 121 YKSWGIGAPSSVNPYCVSLTSTGFGKWKDVPCEDKFSFVCKFKN 166  
RESULT 12  
AAP94614  
ID AAP94614 standard; protein; 165 AA.  
XX  
AC AAP94614;  
XX  
XX 25-MAR-2003 (revised)  
DT 21-JUN-1990 (first entry)  
XX  
XX Human reg protein.  
XX  
XX reg proteins; islet cells; diabetes; insulin; ds.  
XX  
XX Homo sapiens.  
XX  
XX EP303233-A.  
XX  
XX 15-FEB-1989.  
XX  
XX 09-AUG-1988; 88EP-00112942.  
XX  
XX 10-AUG-1987; 87JP-00200514.  
XX  
XX (SHIO ) SHIONOGI & CO LTD.  
XX  
XX Okamoto H, Itoh T, Teraoka H, Tsuzuki H, Yoshida M;  
XX  
XX WPI: 1989-048048/07.  
XX  
XX N-PSDB; AAP94614.  
XX  
XX New human reg proteins - useful for regenerating islet B cells in  
PT diabetes treatment.  
XX  
XX Claim 1; Fig 1; 19pp; English.  
XX  
XX Protein product for reg gene useful in regeneration of human pancreatic  
CC islet B cells in treatment of diabetes. Derivatives from bases 21(Gly),  
CC 22(Gln), 23(Glu), 24(Ala), 25(Gln), 30(Gln), 31(Ala) and 33(ile) to  
CC 165(Asn) are also functional. (Updated on 25-MAR-2003 to correct PA  
CC field.) (Updated on 25-MAR-2003 to correct PI field.)  
XX  
XX Sequence 165 AA;

Query Match 96.7%; Score 873; DB 1; Length 165;  
Best Local Similarity 97.0%; Pred. No. 6.1e-77;  
Matches 160; Conservative 2; Mismatches 3; Indels 0; Gaps 0;  
QY 2 AQTSSYFNLISLMFLSLSQSGQAQTLPQARISCEPTGNAYRSYCYFYFNEDETWVDA 61  
DB 1 AQTSSYFNLISLMFLSLSQSGQAQTLPQARISCEPTGNAYRSYCYFYFNEDETWVDA 60  
QY 62 LYCQNNMGNLVSVLTOAEGAFVASLTKESGTDDEFNVWIGLHDPKKNRRWHSSGSLVS 121  
DB 61 LYCQNNMGNLVSVLTOAEGAFVASLTKESGTDDEFNVWIGLHDPKKNRRWHSSGSLVS 120  
QY 122 KSWGIGAPSSVNPYCVSLTSTGFGKWKDVPCEDKFSFVCKFKN 166  
DB 122 KSWGIGAPSSVNPYCVSLTSTGFGKWKDVPCEDKFSFVCKFKN 166



SCORE Search Results Details for Application 10734564 and Search Result 20070524\_133451\_us-10-734-564-4.rag.

Score Home Retrieve Application SCORE System SCORE Comments / Page List Overview FAQ Suggestions

This page gives you Search Results detail for the Application 10734564 and Search Result 20070524\_133451\_us-10-734-564-4.rag.

Go Back to previous page

GenCore version 6.2.1  
Copyright (c) 1993 - 2007 Bioceleration Ltd.

OM protein - protein search, using sw model

Run on: May 24, 2007, 16:25:44 ; Search time 132 Seconds  
(without alignments)  
615.374 Million cell updates/sec

Title: US-10-734-564-4  
Perfect score: 908  
Sequence: 1 MAQTSSVFMLSLMFLSQS.....QKWKDVPCDKSFVCKFKN 166

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 2782304 seqs, 48933398 residues

Total number of hits satisfying chosen parameters: 2782304

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : A\_Geneseq\_200701.\*  
1: geneseqp1980s.\*  
2: geneseqp1990s.\*  
3: geneseqp2000s.\*  
4: geneseqp2001s.\*  
5: geneseqp2002s.\*  
6: geneseqp2003as.\*  
7: geneseqp2003bs.\*  
8: geneseqp2004s.\*  
9: geneseqp2005s.\*  
10: geneseqp2006s.\*  
11: geneseqp2007s.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	DB	ID	Description
1	908	100.0	166	2	AAR59288	Aar59288 Human reg
2	908	100.0	166	4	AAB71653	Aab71653 Human col
3	908	100.0	166	4	AAB71666	Aab71666 Human reg
4	908	100.0	166	8	ADQ29578	Adq29578 Human reg
5	908	100.0	166	8	ADQ60160	Adq60160 Human reg
6	908	100.0	166	8	ADQ97994	Adq97994 Protein f
7	908	100.0	166	9	AEA04450	Aea04450 Human pro
8	908	100.0	174	3	AAB43737	Aab43737 Human can
9	898	98.9	166	1	AAP81514	Aap81514 Sequence
10	897	98.8	165	1	AAP94614	Aap94614 Human reg
11	884	97.4	166	8	ADQ29576	Adq29576 Human reg
12	871	95.9	166	8	ADU20784	Adu20784 Human reg
13	817	90.0	166	5	ABP69448	Abp69448 Human pol
14	817	90.0	166	8	ADS98793	Ads98793 Protein f
15	810	89.2	146	2	AAR66591	Aar66591 Human reg
16	810	89.2	147	2	AAR06425	Aar06425 Reg prote
17	799	88.0	144	2	AAR66592	Aar66592 Human reg
18	785	86.5	166	7	ADC78801	Adc78801 Human PRO
19	785	86.5	166	8	ADU20785	Adu20785 Human reg
20	785	86.5	166	9	AEA04451	Aea04451 Human pro
21	785	86.5	166	10	AEF69882	Aef69882 Microsate
22	785	86.5	174	3	AAB54301	Aab54301 Human pan
23	745	82.0	133	2	AAR66593	Aar66593 Human reg
24	680	74.9	165	2	AAR34535	Aar34535 MUREG-1.
25	637	70.2	165	1	AAP94615	Aap94615 Rat reg p
26	635	69.9	165	1	AAP81513	Aap81513 Sequence
27	635	69.9	165	1	AAP83188	Aap83188 Sequence
28	635	69.9	165	2	AAR59289	Aar59289 Rat reg p
29	618.5	68.1	173	2	AAR34536	Aar34536 MUREG-2.
30	588.5	64.8	294	4	ABG01855	Abg01855 Novel hum
31	588.5	64.8	294	8	AUS98699	Ads98699 Protein f
32	588.5	64.8	406	4	ABG03060	Abg03060 Novel hum
33	588.5	64.8	406	8	ADS98701	Ads98701 Protein f
34	588.5	64.8	558	4	ABG00465	Abg00465 Novel hum
35	582	64.1	146	2	AAR66594	Aar66594 Rat reg p
36	571	62.9	144	2	AAR66595	Aar66595 Rat reg p
37	534	58.8	133	2	AAR66596	Aar66596 Rat reg p
38	517	56.9	132	8	ADO21124	Ado21124 Human cat
39	513	56.5	240	4	ABG20353	Abg20353 Novel hum
40	465	51.2	117	6	ABR57096	Abr57096 MJHR comp
41	443.5	48.8	175	5	ABJ10605	Abj10605 Human nov
42	443.5	48.8	175	8	ADO09871	Ado09871 Human NOV
43	438.5	48.3	175	2	AAR57117	Aar57117 Human Pan
44	438.5	48.3	175	2	AAR54098	Aar54098 Mouse PAP
45	438.5	48.3	175	7	ADC78805	Adc78805 Human PRO

ALIGNMENTS

RESULT 1  
AAR59288  
ID AAR59288 standard; protein: 166 AA.  
XX  
AC AAR59288;

XX 25-MAR-2003 (revised)  
DT 03-FEB-1995 (first entry)  
XX  
DE Human reg protein.  
XX  
KW Human reg protein; blood sugar level depressant; hypoglycaemic agent;  
KW diabetes; hyperglycaemia; cell proliferation; islets of Langerhans.  
XX  
OS Homo sapiens.  
XX  
FH Key Location/Qualifiers  
FT Peptide 21..166  
FT /note= "claimed subfragment"  
FT Peptide 23..166  
FT /note= "claimed subfragment"  
FT Peptide 34..166  
FT /note= "claimed subfragment"  
XX  
PN W09412203-A1.  
XX  
XX 09-JUN-1994.  
XX  
XX 01-DEC-1993; 93WO-JP001746.  
XX  
XX 01-DEC-1992; 92JP-00322121.  
PR 19-APR-1993; 93JP-00091576.  
XX  
XX (SHIO ) SHIONOGI SEIYAKU KK.  
XX  
XX Okamoto H;  
XX  
XX WPI; 1994-199962/24.  
DR  
XX  
XX Sugar level depressants and cell proliferation agents comprising reg  
PT proteins - for treatment of diabetes, and inducing growth of islets of  
PT Langerhans.  
PT  
XX  
XX Claim 1; Page 11; 20pp; Japanese.  
XX  
XX Three specified subfragments of the human reg protein are claimed for use  
CC as blood sugar level depressants to treat diabetes. They are also useful  
CC to induce proliferation of cells in the islets of Langerhans. (Updated on  
CC 25-MAR-2003 to correct PN field.)  
XX  
XX Sequence 166 AA;  
SQ  
  
Query Match 100.0%; Score 908; DB 2; Length 166;  
Best Local Similarity 100.0%; Pred. No. 2.1e-80;  
Matches 166; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 1 MAQTSYFMILISCLMFLSQSGQGAQTLPQARISCPGCTNAYRSYCYFNEDETRTWDA 60  
Db 1 MAQTSYFMILISCLMFLSQSGQGAQTLPQARISCPGCTNAYRSYCYFNEDETRTWDA 60  
  
Qy 61 DLYCQNMNSGNLVSVLTOAEGAFVASLTKESGTDDEFNVWIGLHDPKKNRRHWSGSLVS 120  
Db 61 DLYCQNMNSGNLVSVLTOAEGAFVASLTKESGTDDEFNVWIGLHDPKKNRRHWSGSLVS 120  
  
Qy 121 YKSWGIGAPSSVNPVCVSLTSTGFGQKWKDVPCEDKFSFVCKFKN 166  
Db 121 YKSWGIGAPSSVNPVCVSLTSTGFGQKWKDVPCEDKFSFVCKFKN 166  
  
Qy 121 YKSWGIGAPSSVNPVCVSLTSTGFGQKWKDVPCEDKFSFVCKFKN 166  
Db 121 YKSWGIGAPSSVNPVCVSLTSTGFGQKWKDVPCEDKFSFVCKFKN 166

Db 121 YKSWGIGAPSSVNPVCVSLTSTGFGQKWKDVPCEDKFSFVCKFKN 166  
  
RESULT 2  
AAB71653  
ID AAB71653 standard; protein; 166 AA.  
XX  
AC AAB71653;  
XX  
DT 10-MAY-2001 (first entry)  
XX  
DE Human colon associated protein #1.  
XX  
KW Human; colon; cancer; disease.  
XX  
OS Homo sapiens.  
XX  
PN W0200112781-A1.  
XX  
XX 22-FEB-2001.  
XX  
XX 11-AUG-2000; 2000WO-US022157.  
XX  
XX 13-AUG-1999; 99US-0148680P.  
XX  
XX (HUMA-) HUMAN GENOME SCI INC.  
XX  
XX Birse CE, Rosen CA;  
XX WPI; 2001-147551/15.  
XX  
XX Nucleic acids encoding 13 human colon cancer associated polypeptides,  
PT useful for preventing, diagnosing and/or treating e.g. cancers  
PT (especially colon cancer), Parkinson's disease and diabetic retinopathy.  
XX  
XX Claim 11; Page 315-316; 326pp; English.  
XX  
XX The present invention relates to 13 human colon cancer-associated  
CC proteins. These proteins and the nucleic acid encoding them may be used  
CC in the prevention, diagnosis and treatment of diseases associated with  
CC inappropriate colon cancer-associated protein expression  
XX  
XX Sequence 166 AA;  
SQ  
  
Query Match 100.0%; Score 908; DB 4; Length 166;  
Best Local Similarity 100.0%; Pred. No. 2.1e-80;  
Matches 166; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
Qy 1 MAQTSYFMILISCLMFLSQSGQGAQTLPQARISCPGCTNAYRSYCYFNEDETRTWDA 60  
Db 1 MAQTSYFMILISCLMFLSQSGQGAQTLPQARISCPGCTNAYRSYCYFNEDETRTWDA 60  
  
Qy 61 DLYCQNMNSGNLVSVLTOAEGAFVASLTKESGTDDEFNVWIGLHDPKKNRRHWSGSLVS 120  
Db 61 DLYCQNMNSGNLVSVLTOAEGAFVASLTKESGTDDEFNVWIGLHDPKKNRRHWSGSLVS 120  
  
Qy 121 YKSWGIGAPSSVNPVCVSLTSTGFGQKWKDVPCEDKFSFVCKFKN 166  
Db 121 YKSWGIGAPSSVNPVCVSLTSTGFGQKWKDVPCEDKFSFVCKFKN 166

```
RESULT 3
AAB71666
ID AAB71666 standard; protein; 166 AA.
XX
XX
AC AAB71666;
XX
XX 10-MAY-2001 (first entry)
DT
XX
DE Human colon associated protein #14.
XX
XX Human; colon; cancer; disease.
KW
XX Homo sapiens.
OS
XX
XX WO200112781-A1.
PN
XX 22-FEB-2001.
PD
XX
XX 11-AUG-2000; 2000MO-US022157.
PF
XX
XX 13-AUG-1999; 99US-0148680P.
PR
XX (HUMA-) HUMAN GENOME SCI INC.
PA
XX Birse CE, Rosen CA;
PI
XX WPI; 2001-147551/15.
DR
XX
XX Nucleic acids encoding 13 human colon cancer associated polypeptides,
PT useful for preventing, diagnosing and/or treating e.g. cancers
PT (especially colon cancer), Parkinson's disease and diabetic retinopathy.
PT
XX
XX Claim 11; Page 322-323; 326pp; English.
XX
XX The present invention relates to 13 human colon cancer-associated
CC proteins. These proteins and the nucleic acid encoding them may be used
CC in the prevention, diagnosis and treatment of diseases associated with
CC inappropriate colon cancer-associated protein expression
XX
XX Sequence 166 AA;
SQ
Query Match 100.0%; Score 908; DB 4; Length 166;
Best Local Similarity 100.0%; Pred. No. 2.1e-80;
Matches 166; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MAQTSSYFMLISCLMFLSQSGQEAQTELPOARISCEPTNAYRSYYFNEDETWDA 60
Db 1 MAQTSSYFMLISCLMFLSQSGQEAQTELPOARISCEPTNAYRSYYFNEDETWDA 60
Qy 61 DLYCQNNNSGNLVSVLTQAEQAFVSLIKESGTDNFWNVLGLHDPKKNRHHWSSGSLVS 120
Db 61 DLYCQNNNSGNLVSVLTQAEQAFVSLIKESGTDNFWNVLGLHDPKKNRHHWSSGSLVS 120
Qy 121 YKSWGIGAPSSVNPVCYVSLTSTGFGQKWDVPCEDKFSFVCKFKN 166
Db 121 YKSWGIGAPSSVNPVCYVSLTSTGFGQKWDVPCEDKFSFVCKFKN 166
RESULT 4
ADQ29578
ID ADQ29578 standard; protein; 166 AA.
```

```
XX ADQ29578;
AC
XX 07-OCT-2004 (first entry)
DT
XX Human Regl-alpha protein #2.
DE
XX human; colon cancer; TIMP1; Regl-alpha;
KW colorectal cancer-associated marker.
XX
XX Homo sapiens.
OS
XX EP1439393-A2.
PN
XX 21-JUL-2004.
PD
XX 15-DEC-2003; 2003EP-00257868.
PF
XX 13-DEC-2002; 2002US-0433554P.
PR 31-JUL-2003; 2003US-0491397P.
XX (FARB ) BAYER HEALTHCARE LLC.
PA (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
XX
XX Astle JH, Boardman LA, Bugart LJ, Burgess CC, Catino TJ;
PI Dwivedi P, Huntress M, Johnson KA, Lewis ME, Maimonis PJ, Myerow SH;
PI Brown-Shimer SLA, Thiagalingam A, Thibodeau SN, Molino GA;
XX
XX WPI; 2004-545561/53.
DR N-PSDB; ADQ29577.
XX
XX Diagnosing colon cancer in individual, preferably human, by detecting
PT presence of TIMP 1 in sample, where presence of TIMP 1 in sample is
PT indicative of colon cancer in individual.
XX
XX Claim 7; SEQ ID NO 4; 433pp; English.
XX
XX The invention comprises a method for diagnosing colon cancer in an
CC individual, the method involves obtaining a serum sample from the
CC individual and detecting the presence of either TIMP1 or Regl-alpha and
CC an additional colorectal cancer-associated marker. The method of the
CC invention is useful for diagnosing colon cancer in an individual. The
CC present amino acid sequence represents a human Regl-alpha protein of the
CC invention.
XX
SQ Sequence 166 AA;
Query Match 100.0%; Score 908; DB 8; Length 166;
Best Local Similarity 100.0%; Pred. No. 2.1e-80;
Matches 166; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MAQTSSYFMLISCLMFLSQSGQEAQTELPOARISCEPTNAYRSYYFNEDETWDA 60
Db 1 MAQTSSYFMLISCLMFLSQSGQEAQTELPOARISCEPTNAYRSYYFNEDETWDA 60
Qy 61 DLYCQNNNSGNLVSVLTQAEQAFVSLIKESGTDNFWNVLGLHDPKKNRHHWSSGSLVS 120
Db 61 DLYCQNNNSGNLVSVLTQAEQAFVSLIKESGTDNFWNVLGLHDPKKNRHHWSSGSLVS 120
Qy 121 YKSWGIGAPSSVNPVCYVSLTSTGFGQKWDVPCEDKFSFVCKFKN 166
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```



CC polynucleotide in a sample; a method for detecting the polypeptide in a  
CC sample; a method for identifying a compound that binds to the polypeptide  
CC ; a method for producing the polypeptide; an isolated polypeptide  
CC comprising any of the 235 amino acid sequences described in the  
CC specification; and a collection of polynucleotides comprising of at least  
CC one of the polynucleotides cited above. The polypeptides and  
CC polynucleotides of the invention have antiinflammatory, cytostatic, and  
CC antimicrobial activities. The novel polynucleotide may be used to treat  
CC disorders by gene therapy. The polypeptides and polynucleotides are  
CC useful for treating inflammation, leukaemias, nervous system disorders,  
CC or infections. This sequence represents one of the 235 novel isolated  
CC polypeptides of the invention.

XX  
SQ Sequence 166 AA;

Query Match 100.0%; Score 908; DB 8; Length 166;  
Best Local Similarity 100.0%; Pred. No. 2.1e-80;  
Matches 166; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 MAQTSSYFMLISCLMFLSQSGQEAQTLPQARISCEPTNAYRSYCYFNEDETWVDA 60  
|||||  
Db 1 MAQTSSYFMLISCLMFLSQSGQEAQTLPQARISCEPTNAYRSYCYFNEDETWVDA 60  
Qy 61 DLYCONMNSGLVSVLTQAEAFVSLIKESGTDENWVIGLHDPKKNRHHWSSGLSVS 120  
|||||  
Db 61 DLYCONMNSGLVSVLTQAEAFVSLIKESGTDENWVIGLHDPKKNRHHWSSGLSVS 120  
Qy 121 YKSWGIGAPSSNPGYCVSLTSGTGQKWDVPCEDKFSFVCKPKN 166  
|||||  
Db 121 YKSWGIGAPSSNPGYCVSLTSGTGQKWDVPCEDKFSFVCKPKN 166

#### RESULT 7

AEA04450  
ID AEA04450 standard; protein: 166 AA.

XX  
AC AEA04450;

XX  
DT 28-JUL-2005 (first entry)

XX  
DE Human protein from gene overexpressed in cancer, REGIA.

XX  
KW Tumor marker; colon tumor; cancer; cytostatic; neoplasm; diagnostic;  
KW microarray; drug screening.

XX  
OS Homo sapiens.

XX  
PN WO2005044990-A2.

XX  
PD 19-MAY-2005.

XX  
PF 01-NOV-2004; 2004WO-US036404.

XX  
PR 04-NOV-2003; 2003US-00700439.

XX  
PA (FARB ) BAYER HEALTHCARE LLC.

XX  
PA (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.

XX  
PI Burgess C, Myerow S, Thiagalingam A, Maimonis P, Molino G;  
PI Burgart L, Boardman LA, Thibodeau S, Lewis M;

XX

DR WPI: 2005-372198/38.  
DR N-PSDB: AEA04357.  
XX REFSEQ: NP\_002900.

XX Detecting expression of one or more nucleic acid sequences in biological  
PT sample, useful for detecting cancer, comprises detecting a change in the  
PT expression level of one or more nucleic acid sequences relative to a  
PT control expression level.

XX Claim 20; SEQ ID NO 95; 256pp; English.

XX The invention relates to detecting differential expression of one or more  
CC nucleic acid sequences (appearing as AEA04356-AEA04448 in a biological  
CC sample comprising obtaining the sample from a subject, and detecting a  
CC change in the expression level of one or more nucleic acid sequences  
CC relative to a control expression level of the nucleic acid sequences, is  
CC new. Also included are detecting cancer (or a pre-malignant condition  
CC thereof) in a subject (comprising comparing the expression level of one  
CC or more nucleic acid sequences in a biological sample from the subject  
CC with a control expression level of the nucleic acid sequences, where a  
CC change of at least two-fold in the expression level of the nucleic acid  
CC sequences is indicative of cancer or pre-malignant condition), monitoring  
CC the onset (or progression, or regression) of cancer (or a pre-malignant  
CC condition) in a subject (by detecting in a biological sample of the  
CC subject at a first point in time the expression of one or more nucleic  
CC acid sequences, repeating the first step at a subsequent point in time  
CC and comparing the expression level detected, where a change in the  
CC expression level is indicative of progression of cancer or its pre-  
CC malignant condition in the subject), determining prognosis for cancer or  
CC its pre-malignant condition in a subject (comprising detecting in a  
CC biological sample of the subject, the expression level of one or more  
CC nucleic acid sequences, comparing the expression level with a reference  
CC expression level of the nucleic acid sequences and evaluating the  
CC prognosis of the subject based on the comparison), determining the  
CC efficacy of a test compound for inhibiting cancer in a subject,  
CC determining the efficacy of a therapy for inhibiting cancer in a subject,  
CC selecting a composition for inhibiting cancer in a subject, inhibiting  
CC cancer in a subject, a polypeptide encoded by the nucleic acids above  
CC (appearing as AEA0449-AEA04541), an antibody that specifically binds to  
CC the polypeptide sequence, and detecting in a biological sample the  
CC presence of a polypeptide. The method is useful for detecting  
CC differential expression of one or more nucleic acid sequences in a  
CC biological sample, which is useful for detecting cancer (especially colon  
CC cancer), monitoring the onset, progression, or regression of cancer or a  
CC pre-malignant condition, or determining prognosis for cancer or its pre-  
CC malignant condition in a subject, or for determining the efficacy of a  
CC test compound for inhibiting cancer in a subject. The compound is useful  
CC for inhibiting cancer in a subject. The antibodies may also be used to  
CC treat cancer. The present sequence is a protein from a human gene over-  
CC expressed in cancer samples.

XX Sequence 166 AA;

Query Match 100.0%; Score 908; DB 9; Length 166;

Best Local Similarity 100.0%; Pred. No. 2.1e-80;

Matches 166; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MAQTSSYFMLISCLMFLSQSGQEAQTLPQARISCEPTNAYRSYCYFNEDETWVDA 60  
|||||

Db 1 MAQTSSYFMLISCLMFLSQSGQEAQTLPQARISCEPTNAYRSYCYFNEDETWVDA 60  
|||||

Qy 61 DLYCONMNSGNLVSIVTOAGAFVASLIKESGTDNFNVWIGLHDPKKNRRHWSGSLVS 120  
|||||  
Db 61 DLYCONMNSGNLVSIVTOAGAFVASLIKESGTDNFNVWIGLHDPKKNRRHWSGSLVS 120  
Qy 121 YKSWGIGAPSSVNPVGVSVLTSTSTGFKWKDVPCEDKFSFVCKEKN 166  
|||||  
Db 121 YKSWGIGAPSSVNPVGVSVLTSTSTGFKWKDVPCEDKFSFVCKEKN 166

RESULT 8  
AAB43737  
ID AAB43737 standard; protein; 174 AA.  
XX AAB43737;  
XX AC  
XX 08-FEB-2001 (first entry)  
XX DE Human cancer associated protein sequence SEQ ID NO:1182.  
XX Human; cancer associated gene; cancer antigen; detection; cancer;  
KW diagnosis; cytostatic; proliferative; vulnery; immunomodulator;  
KW antidiabetic; antiasthmatic; antirheumatic; antiarthritic; antiviral;  
KW antiinflammatory; antithyroid; antiallergic; antibacterial; cardiac;  
KW dermatological; neuroprotective; thrombolytic; coagulant; nootropic;  
KW vasotropic; antipsoriatic; antiangiogenic; gene therapy; inflammation;  
KW immune disorder; haematopoietic cell disorder; autoimmune disorder;  
KW allergic reaction; graft versus host disease; organ rejection;  
KW haemostatic; thrombolytic; cardiovascular disorder; infection;  
KW neurological disease; drug screening.  
XX  
OS Homo sapiens.  
XX  
XX WO200055350-A1.  
XX  
XX 21-SEP-2000.  
XX  
XX 08-MAR-2000; 2000WO-US005882.  
XX  
XX 12-MAR-1999; 99US-0124270P.  
XX (HUMA-) HUMAN GENOME SCI INC.  
XX  
XX Rosen CA, Ruben SM;  
XX  
XX WPI; 2000-587533/55.  
XX N-PSDB; AAC77946.  
XX  
XX Novel isolated nucleic acids comprising sequences encoding peptides  
XX useful for treating or diagnosing e.g. cancer.  
XX  
XX Claim 11; Page 1805-1806; 2352pp; English.  
XX  
XX AAC77607 to AAC78448 encode the human cancer associated proteins given in  
XX ABA43398 to ABA44239. The proteins can have activities based on the  
XX tissues and cells the genes are expressed in. Example of activities  
XX include: cytostatic; proliferative; vulnery; immunomodulator;  
XX antidiabetic; antiasthmatic; antirheumatic; antiarthritic;  
XX antiinflammatory; antithyroid; antiallergic; antibacterial; antiviral;  
XX dermatological; neuroprotective; cardiac; thrombolytic; coagulant;  
XX nootropic; vasotropic; antipsoriatic and antiangiogenic. The  
XX polynucleotides and polypeptides can be used for preventing, treating or

CC ameliorating medical conditions and diagnosing pathological conditions.  
CC Polynucleotides, polypeptides, antibodies, agonists and antagonists from  
CC the present invention may be used to treat immune disorders by activating  
CC or inhibiting the proliferation, differentiation or mobilisation of  
CC immune cells, to treat disorders of haematopoietic cells, autoimmune  
CC disorders, allergic reactions, graft versus host disease and organ  
CC rejection, modulate haemostatic or thrombolytic activity, modulate  
CC inflammation, cancers, cardiovascular disorders, neurological disease and  
CC bacterial or viral infections. The peptides, nucleotides, antibodies,  
CC agonists and antagonists may be also be used in drug screens. AAC78449 to  
CC AAC78457 and AAB44240 represent sequences used in the exemplification of  
XX the present invention  
XX  
SQ Sequence 174 AA;  
Query Match 100.0%; Score 908; DB 3; Length 174;  
Best Local Similarity 100.0%; Pred. No. 2.2e-80;  
Matches 166; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 MAOTSSYFNLISCLMFLISQSGQEAQTELPQARISCEPTGNAYRSYCYFNEDETRTWDA 60  
|||||  
Db 9 MAOTSSYFNLISCLMFLISQSGQEAQTELPQARISCEPTGNAYRSYCYFNEDETRTWDA 68  
Qy 61 DLYCONMNSGNLVSIVTOAGAFVASLIKESGTDNFNVWIGLHDPKKNRRHWSGSLVS 120  
|||||  
Db 69 DLYCONMNSGNLVSIVTOAGAFVASLIKESGTDNFNVWIGLHDPKKNRRHWSGSLVS 128  
Qy 121 YKSWGIGAPSSVNPVGVSVLTSTSTGFKWKDVPCEDKFSFVCKEKN 166  
|||||  
Db 129 YKSWGIGAPSSVNPVGVSVLTSTSTGFKWKDVPCEDKFSFVCKEKN 174

RESULT 9  
AAP81514  
ID AAP81514 standard; protein; 166 AA.  
XX  
XX AAP81514;  
XX  
XX 25-MAR-2003 (revised)  
XX 02-FEB-1991 (first entry)  
XX  
XX Sequence encoded by human reg cDNA.  
XX  
XX Pancreatic islet B cell regeneration; diabetes; therapy.  
XX  
XX Homo sapiens.  
XX  
XX EP286114-A.  
XX  
XX 12-OCT-1988.  
XX  
XX 08-APR-1988; 88EP-00105623.  
XX  
XX 09-APR-1987; 87JP-00087807.  
XX 10-AUG-1987; 87JP-00200514.  
XX 24-MAR-1988; 88JP-00071671.  
XX 04-AUG-1988; 88JP-00195727.  
XX 09-AUG-1988; 88EP-00112942.  
XX  
XX (SHIO ) SHIONOGI SEIYAKU KK.  
XX  
XX

PI Okamoto H;  
XX WPI; 1988-287314/41.  
DR N-PSDB; AAN81962.  
XX Rat and human reg genes - used for producing proteins for regeneration of  
PT insulin-producing pancreatic B cells of patients with diabetes.  
XX Disclosure; Fig 3; 12pp; English.  
XX The reg gene is specifically expressed in regenerating pancreatic islet B  
CC cells. A gene hybridizing to a probe corresponding to at least a part of  
CC the whole base sequence of rat reg gene or human reg gene is claimed. By  
CC mass producing the proteins encoded by the gene it may be possible to  
CC open a new dimension in the treatment of diabetes (Updated on 25-MAR-2003  
CC to correct PD field.) (Updated on 25-MAR-2003 to correct PR field.)  
XX Sequence 166 AA;  
SQ  
Query Match 98.9%; Score 898; DB 1; Length 166;  
Best Local Similarity 98.8%; Pred. No. 2e-79;  
Matches 164; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
QY 1 MAQTSSYFMLISCLMFLSQSQGEAQTLPQARISCEPGETNAYRSYCYFNEDETRTWDA 60  
DB 1 MAQTSSYFMLISCLMFLSQSQGEAQTLPQARISCEPGETNAYRSYCYFNEDETRTWDA 60  
QY 61 DLYCONNSGNLVSVLTQAEAFVSLIKESGTDDEFNVWIGLHDPKKNRHHWSSGSLVS 120  
DB 61 DLYCONNSGNLVSVLTQAEAFVSLIKESGTDDEFNVWIGLHDPKKNRHHWSSGSLVS 120  
QY 121 YKSWGIGAPSSVNPVCYVSLTSTGTFQKWKDVPCEKFSVCKEKN 166  
DB 121 YKSWGIGAPSSVNPVCYVSLTSTGTFQKWKDVPCEKFSVCKEKN 166  
RESULT 10  
AAP94614  
ID AAP94614 standard; protein; 165 AA.  
AC AAP94614;  
XX 25-MAR-2003 (revised)  
DT 21-JUN-1990 (first entry)  
XX Human reg protein.  
XX reg proteins; islet cells; diabetes; insulin; ds.  
XX Homo sapiens.  
XX EP303233-A.  
XX 15-FEB-1989.  
XX 09-AUG-1988; 88EP-00112942.  
XX 10-AUG-1987; 87JP-00200514.  
XX (SHIO ) SHIONOGI & CO LTD.  
XX

PI Okamoto H, Itoh T, Teraoka H, Tsuzuki H, Yoshida M;  
XX WPI; 1989-048048/07.  
DR N-PSDB; AAP94614.  
XX New human reg proteins - useful for regenerating islet B cells in  
PT diabetes treatment.  
XX Claim 1; Fig 1; 19pp; English.  
XX Protein product for reg gene useful in regeneration of human pancreatic  
CC islet B cells in treatment of diabetes. Derivatives from bases 21(Gly),  
CC 22(Gln), 23(Glu), 24(Ala), 25(Gln), 30(Gln), 31(Ala) and 33(Ile) to  
CC 165(Asn) are also functional. (Updated on 25-MAR-2003 to correct PA  
CC field.) (Updated on 25-MAR-2003 to correct PI field.)  
XX Sequence 165 AA;  
SQ  
Query Match 98.8%; Score 897; DB 1; Length 165;  
Best Local Similarity 99.4%; Pred. No. 2.5e-79;  
Matches 164; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
QY 2 AQTSSYFMLISCLMFLSQSQGEAQTLPQARISCEPGETNAYRSYCYFNEDETRTWDA 61  
DB 1 AQTSSYFMLISCLMFLSQSQGEAQTLPQARISCEPGETNAYRSYCYFNEDETRTWDA 60  
QY 62 LYCONNSGNLVSVLTQAEAFVSLIKESGTDDEFNVWIGLHDPKKNRHHWSSGSLVS 121  
DB 61 LYCONNSGNLVSVLTQAEAFVSLIKESGTDDEFNVWIGLHDPKKNRHHWSSGSLVS 120  
QY 122 KSWGIGAPSSVNPVCYVSLTSTGTFQKWKDVPCEKFSVCKEKN 166  
DB 121 KSWGIGAPSSVNPVCYVSLTSTGTFQKWKDVPCEKFSVCKEKN 165  
RESULT 11  
ADQ29576  
ID ADQ29576 standard; protein; 166 AA.  
XX AC ADQ29576;  
XX 07-OCT-2004 (first entry)  
XX Human Regl-alpha protein #1.  
XX human; colon cancer; TIMP1; Regl-alpha;  
KW colorectal cancer-associated marker.  
XX Homo sapiens.  
XX OS  
XX EP1439393-A2.  
XX 21-JUL-2004.  
XX 15-DEC-2003; 2003EP-00257868.  
XX 13-DEC-2002; 2002US-0433554P.  
XX 31-JUL-2003; 2003US-0491397P.  
XX (FARB ) BAYER HEALTHCARE LLC.  
XX (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.  
XX

```
XX Astle JH, Boardman LA, Bugart LJ, Burgess CC, Catino TJ;
PI Dwivedi P, Huntress M, Johnson KA, Lewis ME, Maimonis PJ, Myerow SH;
PI Brown-Shimer SLA, Thiagalingam A, Thibodeau SN, Mollino GA;
XX WPI; 2004-545561/53.
DR N-ESDB; ADQ29575.
XX
XX Diagnosing colon cancer in individual, preferably human, by detecting
PT presence of TIMP 1 in sample, where presence of TIMP 1 in sample is
PT indicative of colon cancer in individual.
XX
XX Claim 7; SEQ ID NO 2; 433pp; English.
XX
XX The invention comprises a method for diagnosing colon cancer in an
CC individual, the method involves obtaining a serum sample from the
CC individual and detecting the presence of either TIMP1 or RegI-alpha and
CC an additional colorectal cancer-associated marker. The method of the
CC invention is useful for diagnosing colon cancer in an individual. The
CC present amino acid sequence represents a human RegI-alpha protein of the
CC invention.
XX
XX Sequence 166 AA;
SQ
Query Match 97.4%; Score 884; DB 8; Length 166;
Best Local Similarity 97.6%; Pred. No. 4.7e-78;
Matches 162; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
QY 1 MAQTSSYFMLISCLMFLSQSGQEAQTLPQARISCPGTNAYRSYCYFNEDETRTWDA 60
DB 1 MAQTNSFFMLISLMLFLSLSQSGQEAQTLPQARISCPGTNAYRSYCYFNEDETRTWDA 60
QY 61 DLYQNNNSGNLVSVLTOAGAFVSLIKESGTDDEFNWMIGLHDPKKNRHHWSSGSLVS 120
DB 61 DLYQNNNSGNLVSVLTOAGAFVSLIKESGTDDEFNWMIGLHDPKKNRHHWSSGSLVS 120
QY 121 YKSWGIGAPSSVNPVCYVSLTSTGTFQKWKDVPCEDKFSFVCKFKN 166
DB 121 YKSWGIGAPSSVNPVCYVSLTSTGTFQKWKDVPCEDKFSFVCKFKN 166
RESULT 12
ADU20784
ID ADU20784 standard; protein; 166 AA.
XX
XX AC ADU20784;
XX
XX DT 13-JAN-2005 (first entry)
XX
XX DE Human RegIalpha polypeptide, SEQ ID 1.
XX
XX KW RegIalpha; RegIbeta; RegIII; RegIV; EXTL3; tumour; Reg signaling;
XX pro-apoptosis; human.
XX
XX OS Homo sapiens.
XX
XX PN WO2004092352-A2.
XX
XX PD 28-OCT-2004.
XX
XX PF 14-APR-2004; 2004WO-US009286.
```

```
XX
XX 14-APR-2003; 2003US-0462317P.
XX 08-APR-2004; 2004US-00819991.
XX (UNIW ) UNIV WASHINGTON.
XX
XX Dieckgraefe BK, Korzenik JR;
XX WPI; 2004-766858/75.
XX
XX New methods comprising delivering to a tumor cell an antisense construct
PT comprising at least 15 nucleotides of the complement of a rat, mouse or
PT human Reg gene family cDNA, useful for disrupting Reg signaling pathway.
XX
XX Disclosure; Fig 2; 75pp; English.
XX
XX The invention relates to a method that involves delivering to a tumour
CC cell an antisense construct comprising at least 15 nucleotides of the
CC complement of a rat, mouse or human Reg gene family cDNA selected from
CC RegIalpha, RegIbeta, RegIII, RegIV, and EXTL3, where the tumour cell
CC expresses an mRNA molecule that is complementary to native mRNA of the
CC Reg gene. A COX-2 inhibitor, a chemotherapeutic drug and radiation is
CC also administered to the tumour cell. This method also comprises
CC administering to a tumour cell an RNA interference construct comprising
CC at least 19 nucleotides of a rat, mouse, or human Reg gene family cDNA.
CC The RNA interference construct encodes a small hairpin RNA. The RNA
CC interference construct encodes each strand of an interference RNA duplex
CC under the control of a separate promoter. The RNA interference construct
CC contains an inverted repeat of the Reg family gene cDNA. The method
CC alternatively comprises delivering to a tumour cell siRNA comprising 19-
CC 21 bp duplexes of a rat, mouse or human Reg gene family RNA, where the
CC siRNA comprises 2 nt 3' overhangs, where the Reg gene mRNA produced by
CC the tumour cell is cleaved. The method can comprise contacting a rat,
CC mouse or human EXTL3 protein and a rat, mouse, or human Reg protein, in
CC the presence or absence of a test substance; determining binding of the
CC Reg protein to the EXTL3 protein in the presence and in the absence of a
CC test compound; and identifying a test substance, which inhibits binding
CC of the Reg protein to the EXTL3 protein. The method can also comprise
CC delivering an inhibitor of binding of, or an antibody that binds to a
CC rat, mouse, or human EXTL3 protein to a rat, mouse, or human Reg protein.
CC The methods are useful for disrupting Reg signaling pathway to permit
CC spontaneous and therapeutic induction of pro-apoptotic signals to be more
CC effective. The present sequence represents a human RegIalpha polypeptide.
XX
XX Sequence 166 AA;
SQ
Query Match 95.9%; Score 871; DB 8; Length 166;
Best Local Similarity 96.4%; Pred. No. 8.8e-77;
Matches 160; Conservative 2; Mismatches 4; Indels 0; Gaps 0;
QY 1 MAQTSSYFMLISCLMFLSQSGQEAQTLPQARISCPGTNAYRSYCYFNEDETRTWDA 60
DB 1 MAQTNSFFMLISLMLFLSLSQSGQEAQTLPQARISCPGTNAYRSYCYFNEDETRTWDA 60
QY 61 DLYQNNNSGNLVSVLTOAGAFVSLIKESGTDDEFNWMIGLHDPKKNRHHWSSGSLVS 120
DB 61 DLYQNNNSGNLVSVLTOAGAFVSLIKESGTDDEFNWMIGLHDPKKNRHHWSSGSLVS 120
QY 121 YKSWGIGAPSSVNPVCYVSLTSTGTFQKWKDVPCEDKFSFVCKFKN 166
DB 121 YKSWGIGAPSSVNPVCYVSLTSTGTFQKWKDVPCEDKFSFVCKFKN 166
```





